

DELAY REDUCTION METHOD FOR TELEPHONY SYSTEMS WITH
MULTIPLE PACKET GENERATORS

ABSTRACT OF THE DISCLOSURE

A telephony system and method is provided that reduces delay and provides better utilization of upstream bandwidth in delivering packet telephony services to a plurality of subscriber lines via a cable modem system. An exemplary system includes a plurality of voice processing modules, a host processor, and a buffer. Each voice processing module receives digital voice signals from a separate set of subscriber lines, compresses the digital voice signals to generate a voice packet, and transfers the voice packet to the buffer. The host processor then assembles a packet by concatenating the voice packets and transmits the assembled packet for delivery over a data network. Because the plurality of voice processing modules process the voice packets in parallel, delay is reduced in the assembly and transmission of the assembled packet.

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